Bilingual/Multilingual Service Delivery in U.S. Health Care: A Synopsis and Critique of the Recent Literature

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Introduction

The statistical tables and theoretical discussions found in some of the research literature on bilingual service delivery in U.S. health care seem far removed from the experiences of patients and clinicians. Only a few real-life narratives are needed to illustrate the kinds of issues commonly faced by families and health care professionals alike.

> During an ultrasound examination, a seven-year-old girl is used as a translator for her Spanish-speaking mother. The English speaking radiologist asks the girl to tell her mother that the baby, her little brother-to-be, will be stillborn (Haffner 1992).

> A Spanish-speaking beefpacking worker with cumulative trauma disorder in his shoulder and some English ability drives five hours to see a specialist. The English speaking doctor asks how he is feeling. The man replies politely that he is "just fine, feeling very well, thank you." The worker later says he was just being polite but the doctor notes that the man is no longer in pain, returns him to work without further inquiry, and the man's condition worsens (Erickson 1994b).

> A Vietnamese health care paraprofessional, making a translation for an AIDS/HIV booklet, renders the English phrase "the doctor may not be able to tell right away if you have the virus" into Vietnamese as "the doctor may not tell you truly if you have the virus." The translator explained that his experience in Vietnam had led him to believe that most doctors will hide the truth from patients if the news is very bad.[1]

Sometimes, something is "missing in the translation" in health care settings. Too often the translation is missing altogether. This synopsis and critique of the literature pertinent to bi/multilingual health service delivery will provide a baseline of information about the state of the art in bilingual and multilingual services. It will also pinpoint strengths and weaknesses in the current research and offer recommendations and strategies for future efforts. The synopsis begins with a discussion of some key concepts followed by a

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[1] This incident has been reported in several social service training events; it took place while the primary author was a social services administrator in Garden City, Kansas (Erickson 1989).

discussion of four questions that have guided the research review. The literature is then presented, organized by these questions, and noting the theoretical, methodological, and practical implications for further useful research. An Appendix displays key features of the 32 recent articles under review.

Key Terms and Concepts

Linguists have a considerable and sometimes impenetrable jargon, although linguists like Agar (1994) and Tannen (1990) have demonstrated that clear jargon-free writing about language is in fact possible. Some linguistic terminology is briefly introduced here, however, because it is needed to review how language is addressed in the literature.

Language/Cultural Mediation

A core concept in understanding bi/multilingual health service delivery is language/cultural mediation. What has been learned about this concept is briefly summarized in this section of the synopsis.

In this review, a language/cultural mediation is defined as an activity undertaken by anyone involved in a health care transaction that involves crossing a language or cultural boundary. This term, which is more general than "translation" or "interpretation," is useful because the scientific literature on language and language use rejects a narrow view of language. Language is much more than sounds, words, and grammar. Language also includes the social context in which communication occurs (Austin 1962).

Communication among members of different ethnic groups often involves an unequal exchange, reflecting a conscious understanding of historically unequal social relations (Labov 1964; Zentella 1987; Gal 1988). It often rests on different assumptions about goodwill (or lack thereof) on the part of the interactors (Smith 1993; Singh, Lele, and Matohardjono 1988; and compare Erickson 1994a:95). In contemporary theories of linguistic competence, such assumptions are considered essential for communication (Bachman 1990; Hymes 1988; Grice 1975). All this suggests that it is difficult to separate language, its immediate context, and the wider culture from one another. Some researchers maintain that language and culture are analytically inseparable (Agar 1994; Kleifgen and Saville-Troike 1992). According to Haffner (1992: 259),

> Health care professionals must recognize that the situation is always bicultural and not merely bilingual [Haffner 1992:259]

To complicate matters, language and culture, used as terms to define a particular ethnic or linguistic group, are sometimes highly problematic even within national boundaries. Mexican (Durán 1981) and New York/Puerto Rican (Zentella 1987) varieties of Spanish are examples. Gender can also be a factor in communication, presenting a boundary not unlike that presented by different national languages (Tannen 1990). Further, because cultures are always changing, languages are always changing as well (Hasselmo 1974;

Williamson 1991). The literature reviewed here demonstrates how providing bi/multilingual services involves much more than translation and interpretation. Health care researchers make use of many of the theoretical points so often made by linguists, sociolinguists, psychologists, anthropologists, and communication researchers. The term language/cultural mediation reflects the widespread understanding that more than translation or interpretation are at issue in providing bi/multilingual health services.

Competency

Language is not a useful concept by itself. For the purposes at hand, language as it is used by particular people in particular situations is what matters. Linguists use the term competency to describe the ability of speakers to take both context and language features into account in interpersonal communication. These elements include more than just words or the sounds, stress, pauses, and sequence that make them into sentences. They also include pragmatic skills, skills about what to say when. Speakers cannot have a high level of pragmatic competence without a high level of cultural background knowledge. This knowledge not only includes the immediate situation and its meanings, but situationally specific conventions for turn-taking, pause and response time, register (formal or informal speech), and vocabulary. Language/cultural mediation must involve all these language elements and functions (Bachman 1990:87). Pauweis (1992) provides a useful graphic summary for the purposes at hand (Figure 1).

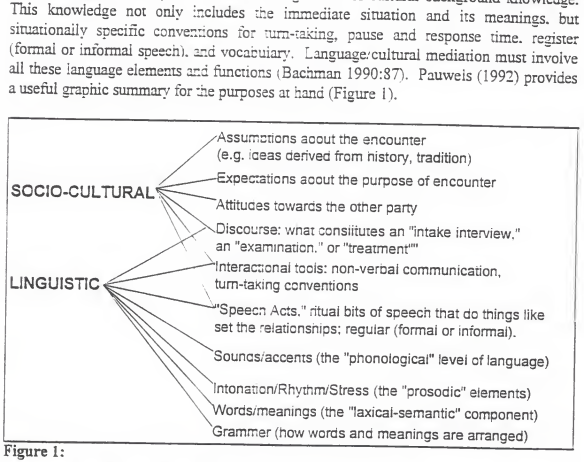

Figure 1:
Elements of language in multilingual health care interaction showing the complex relationship of parts of language and culture, adapted from Pauweis (1990:208).

Cultural and "linguistic" elements are linked at three points in Pauweis' model. Other researchers would remind Pauweis that the language/culture distinction is a product of academic history, and the two are linked in many ways (Bourdieu 1993; Agar 1994).

Nevertheless, the chart provides a useful reference point and a valuable taxonomy for this research review.

Pauwels conducted structured interviews with health care professionals in Australia to discover what elements of language appeared to cause the most trouble and found that the health care providers generally did not recognize many of the elements in Figure 1 as problematic. Instead, they focused on textual and phonological differences in the speech of immigrant patients rather than on the cultural features of the patient/health provider interaction. Furthermore, they did not recognize the structural features within the mainstream health care system that, along with ethnic cultural and historical elements, underlie the assumptions that patients bring with them to the bilingual interaction. This insight, and some of the simple jargon needed to work with it, will be applied in this review. Care will be taken to illustrate what elements of language are at the root of any published study (words and meanings, grammar, and so on from Figure 1).

The Key Questions

This literature review summarizes 32 essays and research reports appearing in the professional and technical literature on the topic of bi/multilingual health care service delivery since 1990.[2] (A summary chart showing each article's authors(s), findings, point of view, health arena addressed, methodology, and language group(s) covered is provided in Appendix 1.) This review is organized by focusing on the research questions that, based on the current literature, appear to matter most to the provision of equitable and language-accessible services in health care. The literature is reviewed to see how well it answers the following key questions:

- What national language groups and sub-groups are represented in the literature?
- What services are mediated?
- What practical problems are dealt with in the literature?
- What are some of the theoretical, methodological, and empirical strengths and weaknesses in the recent research?

The discussion of strengths and weaknesses in the literature will be followed by suggestions for making the research more useful for policy makers and health care planners.

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[2]The following research tools were used: Dissertation Abstracts, ERIC, Language and Language Behavior Abstracts, University of Kansas Academic Information Index, University of Kansas Libraries Holdings (including medical school holdings), Practicing Anthropology Index and others. Subject heading searches varied according to the research tool used. They included sociolinguistics; discourse analysis in medical settings; transcultural medicine, transcultural nursing; interpretation, and translation in medicine; bilingualism or immigration in health care and in health care access.

Groups Represented In the Literature

As Table I shows, the range of language/cultural variation covered by recent studies reflects the new immigration but does not cover the full range of new immigrants. The definitional problems associated with separating one language or dialect from another are apparent here.

Even small states like Kansas show more than 65 languages spoken by students in its public schools (Kreicker 1995). As populations shift, no count of languages spoken by individuals using the U.S. health care system can ever hope to be complete. The languages represented in the U.S. literature reflect only the most obvious patterns of ethnic and cultural diversity, a pattern spawned by the most recent wave of immigration (Lamphere 1992).

TABLE I: LANGUAGE REPRESENTED IN U.S. STUDIES OF BILINGUAL HEALTH CARE DELIVERY[3]

Language Groups or Sub-Groups Named in Recent Studies	Number of Studies
Spanish (not specific)	8
Mexican American	5
Mexican	3
Puerto Rican	1
Portuguese	1
Hmong	3
Vietnamese	2
Lao	2
Khmer	2
"Asian"	1

(Kraut's historical essay [1990] is an important counterpoint.) Many health clinic staff will not find the language or cultural groups they serve represented in the recent literature. To name only a few, Koreans, Sikhs, Russians, and European immigrants are not discussed.

Within much of the recent literature, there is a hint that more complex distinctions within language groups exist and that these distinctions can matter a great deal to clinicians. Haffner (1992) provides specific examples of dialect variations within Mexican Spanish that make a significant difference in clinical care. Brooks (1992) makes two particularly

[3]The total does not equal the number of studies reviewed as some studies are too general to be entered into the table while others discuss more than one language group or sub-group.

important points in this regard: the importance of what linguists call "sociolect" (a dialect based on social class or occupation, in this case, "doctor's talk") and the fact that some doctors are not native speakers of English. His is the only article to address the issue of doctors' English proficiency, although several of the articles note that varieties of English spoken among hospital staff may make a difference (Brooks 1992; Haffner 1992; Ray 1993; Rehbein 1994; Siantz, Dee, and Ingram 1991; Pauwels 1994).

Except for Haffner (1992), Brooks, (1992) and Ingram (Saints, Dee, and Ingram 1994), there was little discussion of the social class or regional differences within a national language. (There are many examples in the linguistics literature: for Spanish see Duran [1988] or Zentella [1989]; and Luong [1992] for Vietnamese.)

Some studies offer conclusions based on the assumption that there is a socially bounded "group" represented by some very general ethnic identifier. Using the term "Asian" is an example. Flaskerud and Akutsu (1993), for example, do not identify which "Asian" group or groups were served by the clinics they studied. They found that "Asian" clients had less severe psychological diagnoses when they visited "Asian" clinics. Their brief research summary does not inform the reader of the nature of the similarities between clients and clinicians even though this similarity is the topic of their research (is a Vietnamese visiting a Korean clinic the same as a Hmong refugee visiting a Punjabi clinic?).

This problem clouds the results of otherwise sophisticated survey research. Kirkman-Liff and Mondragón's (1991) telephone survey (supplemented by in-person interviews to avoid telephone bias) uses the category "Hispanic" and then compares the health status of those interviewed in Spanish with those interviewed in English. The language of interview is found to be non-significant for adults but significant for predicting the health status of children in the interview subject's household. Their essay offers no explanation for their findings. The researchers hope for better statistical techniques to control for the demographic and administration variables to assess the English-Spanish differences. Such analytic procedures will not correct for the absence of a theory that suggests how language variation comes about.

Kirkman-Liff and Mondragón might have explored length of residence, economic status, and country of origin, among other things, during their interviews. Had they done so, they might have reached more useful conclusions about the influence of language use. Nonetheless, their general finding is important: "Public health research of Hispanic populations can be more instrumental toward policy improvement if it increases its specificity with this heterogeneous group" (1991:1399). One study in the literature reviewed here assesses client satisfaction and availability of a "doctor who speaks my language" without addressing the varieties of languages served at all (NACHO 1992). Other studies group Hispanics (Stein and Fox 1990; Ruiz, Marks, and Richardson 1992) under one analytic umbrella. This is a frequently encountered weakness in the hypothesis-testing and descriptive research that relates language to health care access and outcomes.

Services Discussed in the Literature

Many studies reviewed for this synopsis address specific health care arenas. These are shown in Table II. below.

TABLE II: SERVICE ARENAS ADDRESSED

Health Care Arena Studied	Number of Studies
General or theoretical studies	7
Primary health care (general)	4
and women	5
Immigrant or minority clinics	4
and women	2
and AIDS/HIV	1
Mental health	2
Health education	2
Nutrition/weight loss	2
Emergency room	2
Nursing	1

There appears to be an emphasis on women and women's health issues in the literature. Aside from maternal and child health (addressed by Issacs 1993), literature dealing specifically with youth and children is strikingly absent here. (Kirkman-Liff and Mondragon note children's health as a special issue in epidemiological research among Hispanics.) The literature does not include a discussion of men and men's health issues (although the Singer article on AIDS/HIV [1993] addresses both children and men to some extent). There is no coverage of geriatric care in the literature and there seems to be little coverage of pre-service training on bi/multilingual issues for health professionals.

Other areas of health service delivery are also underrepresented. The extent of language minority employment in dangerous occupations (Stull, Broadway, and Erickson 1994; Griffith 1993) makes it surprising that the literature search did not reveal an interest in bilingual care issues in industrial and occupational medicine. Rehabilitation medicine is also not represented. Specific health issues covered in the literature emphasize communication in primary care settings. Health care professionals with the most patient contact tend to have published most of the articles. Nurses and primary care physicians seem to be especially active in reporting problems and solutions in bilingual health service delivery. Several of the articles provide useful suggestions for general clinical settings (Woloshin 1995; Haffner 1992; Issacs 1991; Cousins 1992; Clabots and Delphin 1992).

Practical Problems Addressed in the Literature

The literature covers a number of practical problems that arise from the provision or study of multilingual health care delivery. The three problem areas discussed here include:

- The diversity of languages (and within languages) found in clinical settings and approaches to bridge them;
- The absence (or presence) of qualified interpreters and translators; and,
- The role of culture in complicating interpretation and translation.

Linguistic Diversity

Most English-speaking Americans are surprised to learn about the diversity of languages found in the United States and elsewhere in the world, often in single communities. A clinic director in western Kansas recently reported that she was working with Mexican native peoples who spoke an unwritten Mayan language; second-generation German-speaking Mennonites from Chihuahua, Mexico; and the clinic's "usual" clientele of lowland Lao, Vietnamese, and Mexican immigrants (Schwab 1995).

Any of Pauweis' dimensions of language (Figure 1) can vary by socioeconomic status, region, and even gender. Giles, Williams, and Coupland (1990) demonstrate that age can be a significant sub-cultural factor in exchanges between physicians and their patients even when they supposedly speak the "same" language. In the bilingual literature, only Brooks (1992) and Haffner (1992) discuss this at any length.

As Woloshin suggests, it may not be possible for doctors to learn all the languages in a community. If a high degree of proficiency is necessary, and given the time it takes to learn a language effectively (five to seven years is generally accepted [Hakuta 1992; Cummins 1990]), then language diversity may be an insurmountable problem for health care providers.

Haffner, on the other hand, suggests that clinical staff can learn basic conversational skills rather quickly. Most communities seem to have only four or five dominant language groups (e.g. Price and Cordell 1994; and compare the community descriptions in Lamphere 1994). There is theoretical support for the idea that effective communication depends on effective rapport and shared background knowledge more than it depends on shared lexical codes. This, in turn, suggests that learning to make polite conversation for rapport building may have positive clinical value, something that could be explored empirically in future studies. It also suggests a solution to the problem Woloshin points out, namely that it is unlikely that doctors will become fluent in several languages. They may not have to be fluent to be effective.

Absence of Interpreters

The absence of interpreters depends on a number of factors, including insufficient funding (Woloshin et al 1995; Christmas et al., 1993), the unwillingness of doctors to use them (Brooks 1992; Haffner 1992), and the continued willingness of some health professionals to use children and family members to interpret despite the ethical and practical limitations attending their use. Woloshin et al. (1995) note that while Medicare and Medicaid permit the inclusion of interpretation and translation costs, there is no designated cost center allowing those charges to be directly charged to an individual client. Instead, they are allowed to be included in the overhead rate. According to Woloshin (1995), only Washington State provides for direct billing of interpreter or translation services. Interestingly, even in linguistically heterogeneous New York, there is very limited access to interpreters in clinical settings (Christmas et al., 1993).

The rather obvious step of using someone who is fluent in the target language in administering the research interviews or instruments has evidently not been part of epidemiological survey research in the past. Bilingual surveys or interviews were explicitly included in Ruiz, Marks, and Richardson (1992); Stein and Fox (1990); Naish, Brown, and Denton (1994); Garcha (1994); and, Cousins et al. (1992). But language of interview is not reported and related to results in one important national survey of community and migrant health center client satisfaction (NACHO 1992); the omission calls the results into serious question.

Kirkman-Liff and Mondragón's (1991) article offers an important corrective for researchers who ignore language of interview as a significant element in epidemiological research. While they do not desegregate their "Hispanic" population, they include language among the variables taken into consideration in both research methodology and analysis. Using interpreters in research is not without problems, however. Issacs (1991) noted that Mexican nationals assisting with research in Mexico conducted their interviews rather differently than did Mexican American researchers in the United States. The differences evidently did not result in significant problems in interpreting the data or in constructing the women's health intervention. Perhaps this was because the potential influence of the cultural difference was anticipated and taken into account during the research phase.

Finally, nowhere in the recent literature is there a full discussion of how the community of medical professionals might increase the availability of interpreters or translators, either physicians or interpretation specialists. "Grow-your-own" programs to encourage entry of language minority persons into the medical professions is given a brief mention in Woloshin et al. (1995) but it is not discussed elsewhere. Language training is not discussed as a prerequisite for, or component in, medical training or board certification. Pauweis (1994) and Brooks (1992) offer the only research addressing how physicians are able (or unable) to interpret non-native speakers' communication in health settings and act as their own interpreters.

The Role of Culture

Descriptive studies of health beliefs in relation to access to mainstream medical care are the best source of insight into the link between language and culture in bilingual health care service delivery. Pao (1991) covers the distinction between Christian and traditional Hmong, for example. But some experimental studies have taken these into account. The best example is provided by Cousins et al. (1992).

Cousins et al. (1992) present the results of a clinical trial of two methods of weight loss intervention among obese Mexican American women. Their program was built on a theory about how culture might mediate compliance behavior among Mexican American women. These researchers drew on an essential element from culture theory, that some cultures are less focused on the individual than are others (Douglas 1993). The researchers conducted a controlled experimental study in which some women participated with family members and some without (both were conducted by bilingual Spanish/English registered dietitians). A comparison group received traditional, individual English-language instruction. Cousins found significant relationships over time supporting the hypothesis that linguistically targeted interventions worked better. Furthermore, interventions that were based on cultural theory about group orientation were even more effective. The analysis reflected careful sampling and control for initial variables and suggests further study to identify other "natural" support groups that can be tapped in clinical interventions of this kind. It presents an important contrast to studies that examine the effects of the absence of quality language/culture mediation by providing a well documented experimental study of the consequences of providing both linguistically and culturally targeted interventions.

Finally, the culture of health care sometimes is blind to the culture of the patient. Much of the research on cancer screening suggests that barriers to screening are to be found in the languages and cultures of the clients. Naish's study (1994), unique in that it uses a focus group rather than a survey to get at the patients' views, found that minority women were interested in screening and willing to participate in follow-up. They were, however, concerned about the sanitation in the health clinic and about the clinic's ability to provide reliable results and follow-up. The minority women's actual views stood in contrast to a view of them as uninformed and distanced from the clinic for cultural reasons. The culture of mainstream health providers, rather than the women's lack of English, was the barrier here. The abstract of a dissertation on U.S. Vietnamese women's perspectives (George 1993) appears to point in the same direction.

Some Solutions

There are two general strategies that can be used to address the practical problems discussed above. First, better training for mediators is called for. In addition, better tools for language mediation are needed.

- **Training for Mediators**

Price and Cordell's (1994) prescriptive essay argues from a theory of culture that calls for health educators to examine their own and their clients' cultures in the design of linguistically and culturally appropriate health care programs. This is sound advice. But then the authors suggest a "focused interview process" to discover the client's perspective (p.164). While their training approach is valuable, the interview questions they suggest are much too narrow to be useful in every setting. A more holistic approach will generate questions that are more sensitive to local contexts. LTG Associates' Community Identification (CID) Process (Tashima et al., forthcoming 1996) is an anthropological example of such an approach.

Training is also addressed by two other studies. Rankin and Kappy (1991) document an Arizona program that directly engaged the language and cultural minority communities. Though they report that their training programs drew more participation than most continuing education offerings, the authors do not measure their program's outcome in terms of attitude changes or clinical results. In another example, Singer et al. (1993) designed a training program by examining the nature of community and the nature of sexuality in a particular Spanish-speaking group, using that knowledge to develop a cadre of community-based AIDS/HIV trainers (Singer et al. 1993).

Although they might be thought of as applied research studies, some studies are actually outstanding models of medical education. Most health educators aim to change the understanding of patient groups, but the work of a growing number of applied researchers is directed at revising the structure of the health service delivery system to facilitate better access by diverse linguistic and cultural groups. In this sense, Singer's model of AIDS/HIV intervention has a great deal in common with the work of Cousins et al. (1991) on obesity, with the CID process mentioned above, and with Issacs' (1991) work on breast feeding. All incorporate research and learning about the social and cultural nature of individual health behaviors in the design of programs that cross language and cultural boundaries.

- **Tools for Mediation**

A preference for technical (not social) solutions is sometimes said to characterize U.S. organizational problem solving. Technical solutions to some of the problems presented by language and cultural difference in health care are represented in the literature. Nasir (1993) explored the use of a simple innovation that can save time in the emergency department, a written assessment form in Spanish, designed with true/false questions and containing a carbon copy in English. The carefully documented experiment that was conducted using the form did not examine whether or not a control group of individuals, whose assessments were conducted verbally through an interpreter, resulted in better or worse assessment or care. The speed in completing the assessment was well documented, however, and was found to be significantly faster for patients using the written form than for patients using an interpreter.

Issacs' (1991) project resulted in a video on breast feeding that could be viewed and re-viewed through the use of an interactive touch screen. Evaluation data do not specify whether or not the video decreased inappropriate use of bottle feeding but evidence is offered that documents the usefulness of the technology for culturally "delicate" subjects and for application to family learning settings. Clabots and Delphin (1992) also discuss the production of a videotape. Their comments on the successful negotiation of content across various language/cultural barriers should be instructive to anyone contemplating such a production.

Other computer-aided technologies are explored by Kohlmeir (1995) who used a bilingual computer program to aid the collection of nutritional data in either English or Spanish. Electronic media are mentioned by three studies, Ruíz, Marks, and Richardson (1992), Stein and Fox (1990), and Kirkman-Liff and Mondragón (1991). All agree that television may be particularly effective as a means of providing traditional health education information to Spanish speakers.

Strengths and Weaknesses in the Research

Strengths and weaknesses in the theoretical, methodological, and empirical perspectives offered by the literature are reviewed in this section

Theory

Working on issues that cross language/cultural borders demands the application of some sort of social theory. Much of the survey research reflects a lack of theoretical sophistication in its use of "ethnic" categories (often the same ones devised by the Census Bureau) to explain health outcomes. Research that begins with an understanding of the cultures and languages in question is more useful when it examines the importance of language/culture from the patients' point of view. That simple theoretical insight, combined with an awareness of the connection between language and culture, would lead to more useful research. When researchers do this, they are less likely to jump to conclusions about the validity of particular language categories and are more likely to recognize significant differences that are present within supposedly homogeneous categories like "Hispanic" and "Asian."

Understanding the differences between any two languages and cultures can begin by understanding the "other" culture from the inside. This is a methodological canon in all anthropological studies and in most cross-cultural studies regardless of their institutional roots (Agar 1989; Bernard 1992). For health care, the question becomes, "What does health care provided by an English-speaking provider look like from a non-English speaking person's perspective?" Some of the research has addressed this issue. When it has done so, the results have been more useful for designing programs that effectively bridge language and cultural differences.

Table III shows the number of studies that are explicit in seeking the patient's, the health professional's, or both views in research and analysis.

TABLE III: POINTS OF VIEW REFLECTED IN THE RECENT LITERATURE ON BI/MULTILINGUAL HEALTH CARE DELIVERY

Point of View	Number of Studies
Non-English Speakers' Points of View*	11
Health Professional's Points of View	6
Both non-English Speakers & Professionals	3

*Kraut's (1990) historical review is included here.

Table III does not count studies that formulated a research question or presented analysis based solely on the researcher's perspective. The small number of studies that reflect both the non-English speaker's and the health professional's perspective reflects a significant missing element in the research. Of the three studies categorized as representing both perspectives, one is a first-hand account of interpretation and translation work in a busy hospital (Haffner 1992), two are linguistic analyses of multicultural doctor and patient consultation (Ray 1994; Rehbein 1994), and one is a naturalistic study of multilingual services in a Spanish/English emergency room (Ramirez-Green 1993).

The nature of interpretation has been explored by a number of researchers. They have found that interpreters are not just conduits (Rehbein 1994; Ray 1993), they actively manipulate the social setting. To do so effectively without causing conflict takes finesse and training (Haffner 1992). Related to this point is a criticism that can be levied against much of the research here. Misinterpretation and miscommunication in health care is often laid at the feet of immigrants rather than seen as a shared responsibility. The point is this that language/cultural mediation involves at least two parties, two cultural worlds. Both need attention in research and policy. This theoretical insight should lend support to the position that useful studies should attend to the transactional and two-party nature of the language/culture mediation enterprise in health care.

Method

The methodological criticisms that have been suggested so far stem from this theoretical insight. Methods that begin by asking questions most relevant to health planners will ignore the questions most relevant to language minority individuals. Some researchers suggest that hypothesis testing research must always ignore the "local" perspective because it derives from the discourse of science rather than from the discourse of resistance, the community culture, or some idealized "other" world view. In fact, this review has demonstrated that hypothesis testing research that is well grounded in an

empirical understanding of cultural elements in individual (and family) health can be useful and valid (e.g., Cousins et al., 1992).

Along the same lines, the concern about specificity in identifying the nature of the group under study can not be stressed enough. This does not mean that the national language is not significant. It does mean that the degree of variation within the national language must be assessed from both the clinician's and the patient's viewpoint in order to ask meaningful research questions. For example, researchers who point to the possible importance of television as a means of health education in this review have not been explicit in pointing out what kind of television they are talking about: Spanish television or other television? *Univision*, the largest Spanish network, reflects a Floridian and Caribbean Spanish in much of its programming. Many border communities are influenced by *Televisa*, the Mexican network. Researchers planning to study the potential impact of electronic media or language on health need to be much more specific.

Empirical Questions

There are a number of fascinating empirical questions that are raised by the research reviewed here. There is so far no national, or even regional, study of the linguistic accessibility of health care. How many translators are there? How well trained are they? Do they translate or do they interpret? Are health professionals trained to work with them effectively? How do doctors feel about using them? What languages do they represent? These are all important from a policy point of view.

From the patient's point of view, issues about the culture of U.S. health care, combined with language issues, present an important arena for future empirical research. The systemic difficulties in providing interpretation, including difficulties with funding, will be important topics for future study. The nature of successful translation and interpretation programs needs further study, especially in settings in which more than one or two languages are spoken. The literature is full of examples of problematic language/cultural mediation. More examples of ways in which minority community members and health care professionals are coming to understand one another and reshape their relationships are needed, as more and more communities face the challenge of providing equitable access and equitable results in health care settings.

Research and Policy Implications and Recommendations

The foregoing review and analysis points out a number of gaps in the literature and in the existing research that, in turn, suggest issues that require the attention of both policy-makers and researchers. These issues are briefly summarized in this section, arranged under the broadly identified gaps.

Gaps In Knowledge And Understanding

Limitations in many studies are due to the lack of a sound theory that links language, culture, and health care. Adding this theoretical focus to the research design is important.

and resources are needed to allow examination of appropriate questions on a national scale in order to close the empirical gaps in knowledge. Obtaining information about the availability, nature, and effectiveness of bi/multilingual services is crucial.

Research Is Needed:

- ***On Specific Language Groups***

There is often a "lumping" of populations, under broad ethnic and linguistic umbrellas (e.g., Asian, Hispanic). Mexicans and Southeast Asians are at the center of most research on bilingual services in health care, and few studies address other language groups. The languages represented in the U.S. literature are too limited, reflecting only the most broadly defined patterns of ethnic and cultural diversity; this omission needs to be addressed.

- ***Within Specific Language Groups***

Basic information about the diversity within language groups, as well as diversity among them, is lacking. Where specific national languages are addressed, the dialects, social class, and regional differences within those languages are often ignored, as are factors such as recency of immigration or economic status and how they affect language use and health care access and outcomes. Studies are needed that take these differences into account and explore their implications for effective service provision.

- ***On Specific Populations***

A rather narrow range of health care settings are covered in the research literature, indicating a need to broaden and enhance the research. Maternal and women's health issues and studies in clinics receive more attention in the literature than other health arenas, including language issues of children and youth, men, and the elderly. This does not mean that maternal and women's health studies should be reduced, but rather that studies of other populations need attention as well.

- ***In Specific Settings***

Communication issues in primary health care settings are most often addressed in the literature. There is little coverage regarding pre-service training on bi/multilingual issues for health professionals, of bilingual care issues in industrial and occupational medicine, and in rehabilitation medicine. There is also little coverage regarding the English or second-language proficiency of health care providers in all of the settings in which they practice.

Descriptive Studies Are The Most Effective Means For Exploring The Issues And Filling The Gaps.

Descriptive studies of health beliefs regarding access to medical care are the best source of insight into the link between language and culture in bilingual health care delivery. The culture of health care tends to contain limited information on the culture of the patient. Much of the research suggests that the barriers are the language and culture of

the client. In reality the barriers may lie within the culture of health care or in the interaction of the two. It is important determine and understand what the health care system, provided by English speaking providers, looks like from non-English speakers in order to design programs that more effectively bridge language and cultural differences. More studies are needed that reflect both non-English speaker and health professionals' perspectives. Both are components of any interaction that occurs. Descriptive studies are suited for capturing the intricacies of interaction in a way that other studies cannot.

Gaps In Practice

Language must be viewed and addressed as a component of and affected by both the immediate context in which an interaction is occurring and the wider culture as well. Therefore, effective communication between speakers of two different languages calls for more than just translation services. Effective interpreters must have the ability to take both context and language features into account in an interpersonal communication, and in order to do this, they need a high level of knowledge of the cultural backgrounds represented and the assumptions which both parties to an interaction are bringing with them: this should define good interpretation.

Interpretation Services Must Be Appropriate.

- ***Training For Interpreters Is Needed.***

Where interpretation occurs, it is often conducted inappropriately. There are too few training programs for interpreters (including those, such as clinicians who speak a second language, who interpret as part of their ongoing duties). Interpreters cannot simply be viewed as conduits of information. Training is needed which addresses both language and culture issues and the technical language needed in order to adequately interpret in a health care setting. It is important to recognize that interpreters actively manipulate any social interaction in which they participate. Misinterpretation and miscommunication are often blamed on the non-English speaker rather than being viewed as a shared responsibility of each communicator. Language/culture mediation involves at least two parties and cultures. Regardless of who the mediators are, they generally need better training regarding both their own and others' cultures. Studies are needed that look at the two-party nature of language and culture in health care interactions, including existing models of language and culturally appropriate health service provision.

- ***Children And Other Family Members Should Not Be Used As Interpreters***

Too many children and relatives continue to provide interpretation services in health care settings, which both compromises confidentiality and provides suspect interpretation. Family members are both emotionally involved in the interaction that is occurring and lacking in the technical terminology needed to successfully interpret important health-related information. Trained interpreters should be used in all instances.

Assistance Is Needed To Disseminate Information and Transfer Skills and Knowledge.

There is evidence that as immigration and labor market changes bring new diversity to formerly homogeneous areas, communities can learn from one another regarding effective bi/multilingual health care services. However, there is no formal clearinghouse or technical assistance center or process to provide community health care planners and providers with the tools they need to provide appropriate bi/multilingual health services. Such entities are needed to support efforts to provide appropriate services.

Linguistic Competency Levels and Options Must Be Explored.

It is unrealistic to expect that clinical staff will become fluent in all of the languages spoken by their clientele. Further research is indicated on the effectiveness of clinical staff learning basic conversational skills in another language(s) rather than attempting to become fluent in several languages. There has been some support for the idea that effective communication depends on rapport-building and shared background knowledge more than on shared lexical codes. Thus, it would appear that basic linguistic ability (learning some polite conversation for the purpose of rapport building), combined with the appropriate use of interpreters, may be an effective solution with positive clinical value at least in some instances and should be explored. It may be that clinicians do not have to be fluent in a language in order to be effective health care providers with non- and limited-English speakers. Such an approach needs further testing and documentation.

Gaps In Planning

Despite a growing number of studies that document the geographic and cultural extent of language diversity in the U.S., there is little formal planning to meet the needs of non-English speakers on the part of health care systems. If training programs are addressing this issue (which appears to be most commonly addressed in the field of nursing) they are not publishing their results.

Language and Cultural Issues Must Be Considered In Policy Planning To Meet A Population's Health Needs.

Planning must recognize the fact that while English will remain the cultural and linguistic means of providing health care, labor market, and transportation changes will continue to bring non-English speakers to new health care settings. Planners can no longer set language and cultural issues aside in developing equitable and effective health care policy. Limited access to interpreters results from lack of funding or other resources, unwillingness of providers to use interpreters, and continued use of families for this purpose. All of these issues need to be addressed in planning to meet the health policy needs of a population.

The Availability of Interpreters Must Be Increased.

There was no discussion in the literature reviewed regarding the very important issue of how to increase the availability of interpreters or translators, whether they be health care

providers themselves or interpretation specialists. This includes a lack of discussion on issues such as whether language training should be made a requirement of medical training or Board certification. The lack of qualified, competent interpreters must be addressed in planning for the provision of appropriate health services to any population that includes people potentially in need of such services.

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APPENDIX ONE

KEY FEATURES OF RECENT ARTICLES REVIEWED

AUTHOR	DESCRIPTION	PERSPECTIVE	TYPE OF SERVICE	METHOD	POPULATION
ASTHO (1994)	A comparison of case studies of participating programs show diversity in local problems and methods of outreach, bridging language difference.	Clinics	Community health clinics	Self-reported cases studies of clinics.	Spanish, Viet., Lao, Hmong
Brooks (1992)	Lexical and other differences in African American speech is incomprehensible to many physicians; Mexican Spanish is incomprehensible to many Spanish interpreters.	Researcher	Primary health care	Survey of "common Black expressions"	African American, Spanish
Carol (1992)	Interpreters who are effective become "insiders" and are more than conduits of information.	Interpreter	Primary health care among Cambodians, family nurse practitioners, interpreters.	Interviews and observations in theoretical sample of clinic settings.	Khmer (Cambodian)
Christmas, Heagarty, and Schwartz (1993)	Telephone access is difficult; significantly different for Spanish vs. English speakers.	Client	Prenatal care	Telephone access calls to clinics	Spanish
Chbots and Delphin (1992)	Community involvement in producing language-appropriate health education videotapes details cultural variation in approaches, negotiation of final product among community members.	Community	Health clinics	First hand narrative	Spanish, Portuguese, Lao, Cambodian, Vietnamese, Hmong

AUTHOR	DESCRIPTION	PERSPEC-TIVE	TYPE OF SERVICE	METHOD	POPULA-TION
Cousins et al. (1992)	Language of treatment and attention to a cultural preference (family involvement) have positive impact on outcomes in weight loss programs for Mexican American women.		Obesity treatment	Experimental design with control	Mexican-American
Flaskerud and Akutsu (1993)	Severity and kind of diagnosis among Asian clients was compared for mainstream and Asian-community based clinics, lower morbidity and less severe psychiatric diagnosis is found in "parallel" (multilingual) compared to "mainstream" programs.	Researcher	Psychiatric clinics	Analysis of diagnosis data	"Asian" (?)
Garcha (1994)	Barriers in the clinic's organization, interagency rivalries, insularity, low level of knowledge about client population presented significant barriers to Asian women's health care.	Client	Primary health care	Interviews, observation	East Asian
George (1993)	Variables associated with pediatric immunization compliance are complex for Vietnamese women.	Client	Pediatric Hep B. immunization	Open-ended interviews on stratified random sample of Vietnamese	Vietnamese
Gutfreund (1990)	Language used by bilinguals (Spanish or English) in diagnosis using projective techniques is significant in diagnosis of affective disorder; Spanish produces more affect and more morbidity on standardized assessments.	Researcher	Psychiatric clinics	Pre and post-assessment with experimental treatment	Spanish / English
Haffner (1992)	Interpreter's daily round includes conflicts with staff, highlights wide range of lexical and cultural differences and their sequelae among a variety of Spanish speakers.	Interpreter	Primary health care	First hand report	Varieties of Spanish

AUTHOR	DESCRIPTION	PERSPEC-TIVE	TYPE OF SERVICE	METHOD	POPULA-TION
Issacs (1991)	Linked needs assessment research and health intervention for breast feeding promotion on the U.S./Mexican border.	Researchers, clients	Maternal and infant	Interviews	Mexican Mexican American
Kirkman-Liff & Mondragón (1991)	Language of interview is predictive of children's health status, more so than ethnicity; economic status, not ethnicity, is a better predictor of adult health status.	Researcher	General Epidemiology	Telephone and in-person interviews of large random sample	Mexican American (?)
Kohlmeir (1995)	An assessment tool for nutritional epidemiology included computer assisted self interviews (CASI) in Spanish.	Researcher	Nutritional epidemiology	Literature review	Spanish
Krant (1990)	The history of public health's efforts regarding new immigrants is reviewed including clinical practice at Ellis Island demonstrating early efforts to bridge language and culture in a particular national (U.S.) political and cultural context.	Researcher	Immigrant health assessment	Historical research and literature review	European
NACHO (1992)	Survey of patients in 46 Community and Migrant Health Centers.	Researcher	Community/Migrant Health Clinic	Survey (method unreported) to sample (method unreported)	Unknown
Naish, Brown, and Denton (1994)	Asian clients have positive view of cancer screening but negative view of clinic-based barriers (hygiene, lack of follow-up); demonstrates effectiveness of open-ended discussions to uncover service barriers.	Clients	Cervical cancer screening.	Focus groups	East Asian

AUTHOR	DESCRIPTION	PERSPEC-TIVE	TYPE OF SERVICE	METHOD	POPULA-TION
Nasir (1993)	A written self assessment questionnaire for patients who are not in extremis was completed more quickly than patients who had the questionnaire administered by an interpreter.	Emergency room personnel	Emergency room	Experimental design	Spanish (no varieties specified)
Pao (1991)	Hmong from Christian and traditional communities do not share the same health care practices or preferences.	Client	Primary health care	Observations, interviews	Hmong
Pauwels (1994)	Clinicians are able to identify only four of seven linguistic problems in their experience with inter-cultural communication. Discourse, pragmatics, and cultural features were not recognized as significant by clinicians.	Clinicians	Hospitals and clinics?	Group and individual interviews.	Various
Price and Cordell (1994)	A model of patient teaching is offered to facilitate inter-cultural health education.	Health educators	Health education	Review of literature	Any
Ramirez-Green (1993)	Interviews with small sample show education and income, not language, most predictive of adequate knowledge of discharge prescriptions.	Researcher	ER / Primary care compliance knowledge	Small convenience sample structured interviews	Spanish (Mexican)
Rankin and Kappy (1993)	Community health education program for health providers at Children's hospital is described.	Health practitioners	Hospitals	Narrative	Various
Rehbein (1994)	Dr./Patient interactional breakdown: non-cooperation or rational agents?	Client	Primary care	Discourse analysis of theoretical sample	Turkish and German

AUTHOR	DESCRIPTION	PERSPEC-TIVE	TYPE OF SERVICE	METHOD	POPULA-TION
Rey (1993)	Interpreters do not simply provide a conduit for clinical speech; interpreters actively construct and restructure the content and setting of communication.	Interpreter	Primary care	Case study; linguistic analysis	Various
Ruiz, Marks, Richardson (1992)	A causal model is proposed to link English proficiency to exposure to cancer screening information, participation in screening, and knowledge of cancer symptomology; use of electronic media is suggested to reach Spanish speakers.	Researcher	Breast cancer screening.	Survey in "housing projects"	Mexican Americans (?)
Saints, Dee, and Ingram (1991)	Three views on making nursing practice more "culturally sensitive" are offered. Two focus on communication problems caused by immigrants, one (Ingram) on historical reasons for patient mistrust.	Nurses, clients	Nursing care settings	First-hand reports	Various
Singer et al. (1993)	Development of community-based AIDS/HIV education program.	Clients, health care planners	AIDS/HIV education	Culturally-based community design and action	Puerto Rican Spanish
Stein and Fox (1990)	Television is a preferred source of information for Spanish dominant Latinas on breast cancer; only 13% of those surveyed ever had mammograms.	Client	Breast cancer screening.	Telephone interviews from stratified random-dialed sample	Mexican Americans (?)
Woloshin et al. (1995)	Review of literature finds a need to: improve interpreter services, translations, availability of bilingual medical personnel, English language training for immigrants.	Doctors, hospital administrators	Hospitals, primary care settings	Literature review	Various